



Communicator

October 2012

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ve7sar.net



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The Monthly Newsletter of the Surrey Amateur Radio Club



The Communicator



**SURREY
AMATEUR RADIO CLUB**

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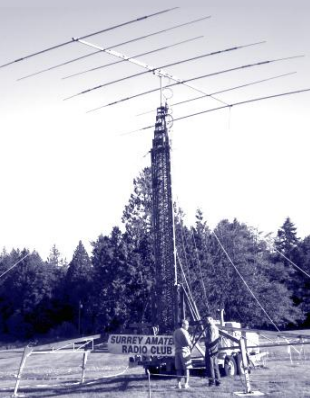
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The **SARC Communicator** is published monthly for members of the Surrey Amateur Radio Club.

SARC maintains a website at www.ve7sar.net that includes club history, meetings, news and other information.



Monthly Meeting Minutes

September 2012

Welcome & Introductions

The meeting was called to order at 1900 hr. President John VA7XB welcomed members, guests and the presenters' team lead by Ian Procyk VE7HHS. The agenda was reviewed and approved.

Financial

Treasurer Scott VE7HA outlined income and expenses for the raffle, and indicated that the profit is to be shared by LARA, SARC and SEPARS. He suggested that next year, we need to get raffle tickets out to members much earlier. Scott then reviewed Field Day expenses and income, stating that the net expense will be shared equally between LARA and SARC. Food and catered meals were the single largest expense, resulting from the late start in

planning and an over-estimate of participant numbers. Scott reminded members that annual club fees are now due. He reported on the bank balance for SARC chequing and savings accounts.

Repeater

John VA7XB gave the repeater report in the absence of Director George VE7QH. The new repeater relocation has been officially coordinated by the BCARCC. BC WARN installation is also completed and functioning at the EOC (No. 1 Fire Hall) in conjunction with Concord Tower site. Thanks to Ian VE7HHS, Dave VE7LTD and the BC-WARN team for expediting this. A meeting in October is planned with Surrey Fire Services to discuss a memorandum-of-understanding which will outline mutual rights and obligations in connection with our use of the facility at Concord Pacific.

CLUB EXECUTIVE 2012-2013

PRESIDENT

John Brodie VA7XB

VICE PRESIDENT

Brett Garrett VE7GM

SECRETARY

Vacant

TREASURER

Scott Hawrelak VE7HA

DIRECTORS

Kelvin Hall VA7KPH
(SEPARS)

John Schouten VE7TI
(Communicator Editor
& Net Manager)

George Merchant
VE7QH (Repeaters)

Bill Little VA7ZBL
(Membership)

Bill Gipps VE7XS

Rob Gilchrist VE7CZV

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President's Report

	SEPARS Net	SARC Net
1 st Tuesday	Drew VA7DRW Jay VE7OFH Standby	Drew VA7DRW
2 nd Tuesday	Dixie VA7DIX Alan VA7BIT Standby	Jinty VA7JMR
3 rd Tuesday	Rob VE7CZV	Anton VE7SSD
4 th Tuesday	Peter VE7PGX Dixie VA7DIX Standby	John VA7XB
5 th Tuesday	Jinty VA7JMR	Bill VE7XS
Want a turn at Net Control? Contact the SARC Net Manager ve7ti @ separs.net		

SARC hosts an Amateur Radio net each Tuesday evening at 8 PM. Please tune in to the VE7RSC repeater at 147.360 MHz (+600 KHz) Tone=110.9, (optional Tone Squelch 110.9) also accessible on IRLP node 1980 and Echo-link node 496228. On UHF we operate a repeater on 443.775MHz (+5Mhz) Tone=110.9 Coming soon, a repeater at 224.000MHz (-1.6MHz).

DOWN THE LOG...

DARS Com-Fest Sept. 30th

John VA7XB inquired as to member interest in purchasing a table for member sales at the Com-Fest swap meet. There appeared to be limited interest.

Operator Training

Jim VE7FO reported on the plans to continue with contest training in the coming year, opening the program up to more newbies and continuing the training with those already in the program. Station Manager training will also commence. He explained that Fred VE7IO will not be able to continue at the level of his last year's activity, nor would Jim VE7FO himself, but that John VA7XB will be offering the use of his station in a limited fashion. The first official training event will be in October. To sign up, interested members should send an email to jimsmith@shaw.ca following which the participant will receive (and must accept) an invitation to the training Yahoo Group.

Brett VE7GM announced that a "Get Your Feet Wet" introduction to contesting had been organized for the coming weekend, taking advantage of the Washington State Salmon Run (QSO Party). Saturday operations will be hosted by Fred VE7IO, while Sunday operations will be hosted by John VA7XB. About 6 members expressed interest in participating. Brett asked those interested to email him at ve7gm@me.com. John VA7XB also indicated that his station will be operating in the CQ WW DX contest (RTTY) at the end of September, and members are welcome to participate in this introductory session.



It was a busy September meeting with standing room only

SEPARS

Kelvin VA7KPH announced the following:

- Sept 18 Net: Fred acts as NCS and will do on-the-air training using new format
- Sept 20 Table-top training in new script and format. All NCS operators are required to attend, and all members are encouraged to attend
- Sept 25 Net resumes with usual NCS operators following the new script and format

Fall Meeting Program

The scheduled lineup for the remainder of the Fall meetings is as follows:

- October 10 - Mike VE7ACN - His Russian Contest Station
- November 14 - George VE7QH - Repeaters 101
- December 15 - Christmas Party

Task Assignments

John VA7XB asked for volunteers for various tasks.

- Secretary position: No volunteers
- Field Day: Brett VE7GM will coordinate; Joyce VA7JCE and Duncan VA7DCN food and refreshments. Chris VA7CWV also offered to assist.
- Annual Foxhunt: Anton VE7SSD
- Member profiles for the Communicator: Jinty VA7JMR
- Equipment maintenance: Rick VE7GMO
- Christmas Party: Jinty VA7JMR assisted by Joyce VA7JCE and Duncan VA7DCN

Emergency Communications Training

Al Munnik VA7MP advised that LARA have had discussions with Kwantlen College about ham classes and emergency communications training.

Presentation - BC-WARN

Ian Procyk VE7HHS, assisted by Geoff VE7KA, Bob VE7WNK, Jeremy VA7NSA and

(Continued on page 4)

SARC Monthly Meetings

2nd Wednesday (Sept-Jun)
1900 hrs local at the Emergency Management BC PREOC,
14275 96th Avenue, Surrey, BC

Weekly Club Breakfast

Friday at 0830 local
ABC Country Restaurant at
600 - 7380 King George Blvd.
Surrey

SARC Net

Tuesday at 2000 hrs local
on 147.360 MHz (+) Tone=110.9

SEPARS Net

Tuesday at 19:30 hrs local
on 147.360 MHz (+) Tone=110.9

Announcements & News

SEPARS Monthly Workshop
Third Thursday, 1900-2130 local
Rm. 214, 13569 - 76th Avenue,
Surrey.

SEPARS Training

Fourth Saturday, 0830 local,
Firehall #1, 88 & 132nd Street,
Surrey

On the Web

ve7sar.net

Between newsletters, watch your e-mail for announcements of events, monthly meetings and training opportunities. These announcements Summer also be found on our web page.

Twitter

[@ve7sar](https://twitter.com/ve7sar)

Photos

[Web Albums](#)

Duncan VE7NEO, gave a comprehensive presentation on the history and capabilities of BC-WARN, including a live demo linking the Southwest PREOC with other nodes on the system. Many thanks to the BC-WARN team for this tremendous enhancement to the functionality of the joint SEPARS/SARC facility.

Following a lively question period, John VA7XB thanked the speakers and the meeting was adjourned at approximately 2115.

~ Minutes recorded by John VA7XB, assisted by notes provided by Brett VE7GM, Jim VE7FO and Kelvin VA7KPH

Anton VE7SSD examines the BC-WARN dish held by Ian Procyk VE7HHS



Invisible Surprises

Those Hams are at it again... With a forgotten technology first used by Marconi, Chip Cohen W1YW, brought Marconi's "metamaterials" to a whole new level--he made them do a disappearing act.

At the Boxboro Convention in Massachusetts on Aug 25, W1YW gave the first public demonstration of an actual invisibility cloak. Well over a 150 eager radio hams and guests saw a live demonstration of metal mast disappear at microwaves, over a wide bandwidth, by partially covering it with a Marconi-inspired invisibility cloak.

W1YW's invisibility cloak is the first actual device that makes things disappear. Using fractals as resonators, it slip-streams the waves around an obstacle, and in that process hides the obstacle completely. It joins these resonators/antennas with a very close (but not touching) spacing--an idea that came to Marconi and his collaborator Franklin in 1919. "Marconi never came close to making an invisibility cloak, but everyone using metamaterials--those closely spaced resonators-- owes that basic idea to him."

W1YW's invisibility cloak development was a slow one over a dozen years. "It harps back to work I would do tinkering with antennas when the bands were dead." The first invisibility cloak demonstration finally came to fruition in 2009.

While science fiction and Harry Potter have fascinated people with the notion of the invisibility cloak, W1YW's invention is the only one that works. W1YW has just received the very first, and basic, patent for invisibility cloaks--U.S. patent 8,253,639.

W1YW also showed a very large invisibility cloak with nearly 10,000 little resonator/antennas making it the largest--in number-- antenna array in the world. "I was delighted to show something very special in terms of the

size and type of objects cloaked. The general public will be aware of this soon, but I wanted my fellow radio amateurs to have the fun of seeing it first". Added W1YW: "This changes everything."

JOTA

[Jamboree on the Air \(JOTA\)](#) October 20-21, is getting closer. The Scouting website has been updated with a great deal of supporting content. They have also just posted a [promotional video](#) directed at hams letting them know what it is and how to get involved. Right on the heels of [School Club Roundup](#) during the preceding weekdays, JOTA is a great opportunity to introduce ham radio to kids and young adults. (Thanks, National Jamboree on the Air Organizer, [Jim K5ND](#))

Delta Basic Course

The Delta Club will also be holding a Basic Licensing course as follows:

Tuesday November 6 & 13	7 pm - 9:30 pm
Thursday November 8 & 15	7 pm - 9:30 pm
Saturday November 10 & 17	9 am - 12:30 pm

The exam will take place on Saturday November 17

October 10th SARC Meeting

Join us for a presentation by Mike Zavarukhin VE7ACN on his contest station at his former home in Russia (*see page 5*).

Please join us at the Emergency Management BC PREOC located at 14275 96th Avenue, Surrey

Russian Contest Station—RW0CWA

Mikhail 'Mike' Zavarukhin's October Meeting Presentation

Mikhail 'Mike' Zavarukhin got his first license UA0CGN in 1982 as a student. Later a switch to UW0CN, and, after the collapse of the Soviet Union, RW0CN. Mike received AA7CH, a US Extra class license in 1989. Not being active for more than a decade while developing his own farm, he got back to ham radio in 2006.

In 2006 Igor RW0CF, Yevgeny UA0CA, Alex RW0CR, Mike RW0CN, Oleg UA0CO, Vlad RZ0CQ, Vlad UA0CW decided to make a contest station on Mike's 100 acre (33 hectare) farm which is located 40 miles (70 km) north of Khabarovsk, Russia. They now have a full size vertical for 160 m and a 4-square for 80 m, 3 element full size Yagi for 40 m at 115 feet (35 meters) on a tower, a 5 element Yagi for 20 m at 65 feet (20 meter), a 6 element Yagi for 15 m at 52 feet (16 meter), and an 8 element Yagi for 10 m. Almost 2,000 foot long (600 m) Beverages are used for North America and Europe on low bands, shorter ones are made for the Pacific and Africa. They use the RW0CWA call sign for team operation. From time to time I work on the air as well as in some contests using my call RW0CN.

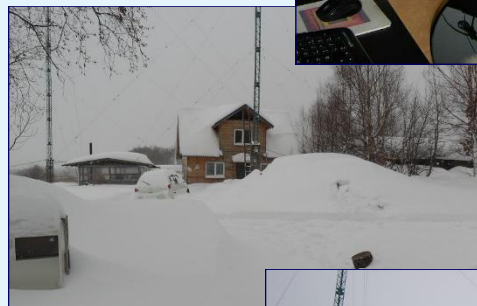
The exact radioshack location is pointed out on the satellite map on QRZ.com. Since the map was made a few years ago, there are no antennas or the shack on it yet.

The station is as close to Japan as Vancouver is to California, and we are really far away from all other major places where Amateur Radio Operators live, 6,000 km to UA3, 7,000-8,000 km to Europe, 7,000 km to the North American West Coast and over 10,000 km to the North American East Coast. It is 12,000 km to the Caribbean over the polar cap. South America, Africa, and Australia - all are over 10,000 km away, so there is no other choice for the real fun of contesting and DXing than to build good antennas and get out of the noisy city.

The new history of the RW0CWA / RT0C club station started in the very end of 2005 to complete all antennas before CQ WW CW 2008. Contesting and DXing became a great enjoyment for those who contributed their time and skills to make this station.

Join us at the SARC meeting on October 10 for many more pictures and the story of one of the best stations in Russia.

~ 73, Mike RW0CN - VE7ACN





The Contest Contender

Jim Smith VE7FO

HF Operator Skill Development

Last year we instituted a training program to assist members in developing their HF Operating skills. These skills included:

- Tuning in stations quickly and accurately.
- Getting the other station's call sign right and getting it the first time.
- Getting and providing fills efficiently (retransmission of information transmitted but not received).
- Logging the QSO quickly and accurately.
- Using the features of the radio to deal with interference.
- Using the features of the logging software to maximize the rate at which information is exchanged.

We're doing it again this year

WHO NEEDS THESE SKILLS?

- Emergency Communicators
- Traffic Handlers
- DX Chasers
- Contesters

HOW DOES THE TRAINING PROGRAM WORK?

First of all, if you're going to learn how to make and log contacts (QSOs) quickly and accurately you need to be in an environment where there are plenty of QSOs to be made. Ham radio contests are ideal for this as there can be several thousand participants, all eager to make a QSO with you. These events take place within a defined length of time - usually 24 or 48 hours. Because of the vagaries of HF propagation you aren't going to hear all of them at the same time and there are plenty who you will never hear. Still, when things are going well, highly skilled operators can make 400 QSOs in one hour.

Consequently, we schedule our training sessions to coincide with major ham radio contests so you will have lots of opportunity to make contacts and hone your skills.

The program consists of getting you on the air and coaching you through all the things that you will need to know how to do. There are no classroom style group sessions (well, there might be one at the beginning), it's all hands on.

It is open to all SARC and SEPARS members, regardless of experience level. If you're a newbie we start you at the newbie level. If you're experienced we start with where you're at and take you further.

It starts in October (exact dates to be announced) and ends in June. Last year we scheduled 13 sessions. Field Day is the

"Final Exam". Well, there's no exam but you do get a chance to show what you've learned.

You don't need to attend every session but you should attend most of them. The more you attend the better your skills will become.

The schedule is based on when the contest events take place. Typically they run from late Friday afternoon to late Sun afternoon. We set up an op schedule for the trainees to put in several hours which are convenient for them during that time.

Four hours provides a pretty good experience. If you can't do four hours in a row, maybe you can do 2 two hour blocks. If you can't do that then you just do what you can.

You can, of course, do more than four hours as long as it doesn't run into another trainee's schedule.

Everybody progresses at their own rate. If you have to miss a session or two you just pick up where you left off, so no worries about falling behind the rest of the trainees.

We manage this training through our operator training Yahoo Group. If you sign up for the course I'll send you an invitation to join it. This is where you'll find all the info on our HF Operator Training program, receive notifications of various training opportunities, etc. You will need to accept the invitation in order to access this material.

For a very good description of ham radio contesting see:

<http://zs6aa.wordpress.com/contesting-faq/>

There's probably more in this FAQ than you really want at the moment. Just read the interesting parts and ignore the rest. Later on you will probably come back to it for more info.

HOW DO I SIGN UP FOR THE PROGRAM?

Just send a request to me, jimsmith@shaw.ca. I will send you an invitation to join the Yahoo Group and we'll go from there.

GET YOUR FEET WET

We are also running some casual operating sessions for those who would like to see what this is all about before committing to anything. You will be coached what to say in order to make contacts. The coach will handle the actual operation of the radio.

Brett, VE7GM, is running this portion of the program and will make an announcement when these sessions are scheduled.

~ 73, Jim VE7FO

Progress in Digital Modes and Contesting

John MacFarlane (VA7PX / VE7AXU)



In 2005 when I started working on HF in digital modes MixW was considered to be one of the best software programs to use. I became a big fan of it and learned all the parameters as well as the macro-writing language that supported it. Over the years its authors seem to have lost interest in it and its popularity has been eclipsed by other Freeware programs that are both powerful and highly “intelligent”.

As a casual contester I was also fascinated to watch Jim Smith (VE7FO) and Fred Orsetti (VE7IO) working a suite of sophisticated Freeware called N1MM an excellent free Windows-based contesting and general logging software. This is a group of separate software that interacts so that it allows a user to control the transceiver, eliminate tiring repetitive contest tasks and automate logging and production of the contest submission.

President John Brodie organized a trial-run of a club contest training program in which a number of club members used Fred Orsetti's magnificent station under the tutelage of Jim Smith. While the learning curve was steep the hands-on training was breath-taking and exciting. It confirmed me as a contester. I worked some RTTY and SSB contests which exposed me to fantastic DX and rapid-paced contesting in both “running” and “search-and-pounce” modes.

As a result I determined to set up this software (it's free) at my own station coupled with the Japanese freeware MMTTY for RTTY operation. I use a Yaesu transceiver which proved a small challenge to configure in these software packages as Yaesu has, in the past, tended to make each one with a different set of parameters for interfacing with software. Some trial and error had the unanticipated outcome of teaching me a lot about my equipment and the software packages - but on the other hand I found it frustrating as well. It seemed to take a lot of trial and error to get it all configured and I had to learn some patience to keep at it.

Jim Smith made himself available to me to give guidance and offer advice. Additionally hams as far away as Minnesota also provided vital advice on-air and via the internet that made it all light up and become operational. It did make me wish I'd paid closer attention to all the detail's in Jim's training sessions last Winter! When it all finally worked I had a very exhilarating feeling. I can certainly recommend N1MM unreservedly to other potential users.

I also downloaded FLDigi, another Freeware, which provides all the digital modes in all their flavours. This is the software that has replaced MixW for me on a day-to-day basis - I am a serious digital mode fan and try to work 5-10 stations every day in as many modes as possible. It also has features which allow you identify “mystery” modes that appear on the computer waterfall so that FLDigi can be used to respond to them.

I tried Ham Radio Deluxe, an amazing program which contains a bewildering number of features - it is currently the most popular digital software on the air - but I think it is too complicated (all a matter of personal taste) but you might find it just your ‘cup of tea’. Every ham has their favourite software based on their own likes and dislikes. It is amazing to me what professional software developers are giving away free to thousands of users. The software is intuitive, sophisticated and intelligent and I suspect would normally cost thousands of dollars if it was being used in a commercial or government application. It's one of the benefits of being an amateur radio operator.

There are several other software Freeware packages available too. I export the radio logs from N1MM and FLDigi to DX Keeper. This software is an excellent logging package which tracks my QSL confirmations (and sends and receives them via eQSL and Logbook of the World) as well as progress I am making toward ham radio awards based on the number and kind of QSLs I am receiving. Many tasks I used to do manually are now fully automated leaving more time for operating and more satisfaction watching the requirements for awards being met.

I hope that Jim Smith and Fred Orsetti will continue to mentor new hams in the art and science of contesting. I need one more SSB and one more RTTY contest under their supervision before I will feel truly self-sufficient. This program built my personal confidence to a point where I can operate with the big-guns. Will I become a champion contester like Jim and Fred - probably not, but it has maximized my enjoyment and my participation and satisfaction.

The competitive nature of contesting puts off some hams. I am not a serious competitor, but I enjoy the action and giving points to others who are more serious. It is also a great way to collect DX, and it is possible to earn the Worked All States award in a single day for focussed participants. Sometimes I send in my log to the organizers, other times my participation is so casual that I don't bother even checking my score. The skills learned and practiced are the ones that you will need should there ever be a mobilization due to a major emergency or disaster. It's also great training for Field Day operations.

There is no reason that all SARC club members should not get on the air in digital modes on HF. Equipment requirements have become ever more modest and second-hand equipment is more than adequate to get going. Hams on the digital modes are the friendliest and most helpful that I have met on-air and PSK (the most popular mode) are easily contacted even in the worst radio conditions. After more than 12,000 QSOs now I can personally recommend it. Thanks to John Brodie for implementing this great program for the Club!

Note: “John VA7XB insists that his only role was to encourage members to participate, and the ‘implementation’ credits go entirely to Jim VE7FO and Fred VE7IO” - Ed



Tech Talk

About Microphones

All Hams use them as a basic piece of operating equipment but most never give it a second thought—the microphone.

A microphone colloquially called a mic or mike is an acoustic-to-electric transducer or sensor that converts sound into an electrical signal.

Both [Thomas Alva Edison](#) and [Emile Berliner](#) filed patent applications for the [carbon microphone](#), in March and June 1877 respectively. After a long legal battle, Edison emerged the victor, and the Berliner patent was ruled invalid by both American and British courts.

There are basically two kinds of microphone technology, dynamic and condenser.

Dynamic mics are actually backwards speakers and generate a small amount of electricity when the diaphragm of the mic moves back and forth under the pressure of the sound waves hitting it.

Condenser mics are powered or biased by electricity and so are more sensitive; they use a more lightweight diaphragm and are better at picking up nuances of sound. "Large diaphragm" condenser mics are more sensitive and more expensive than "small diaphragm" types.

Pickup Patterns isn't what you get when you drive your truck in circles in the snow, but refers to the relative sensitivity of a microphone to sounds coming from the side. A pickup pattern can be...

Omnidirectional picks up equally well in all directions

Unidirectional picks up mostly from one direction

Cardioid picks up in a heart-shaped pattern (hey, you think your dad was kidding when he said studying Latin would come in handy sometime?)

Exotica ribbon mics, tube mics, and most other technologies are probably way out of your budget anyway... except for the PZM (Pressure Zone Microphone), which is patented by Crown and was used by Radio Shack for many years. The current Radio Shack mic is not considered to be much good, but if you can find one of the older ones, you can modify it for serious use.

Plugs everyone is used to teeny little 1/8" plugs found on consumer mics, 1/4" plugs found on guitar cables or the little square plastic ones on your transceiver mic that look like an over-sized telephone plug. Forget all that.

Professional mics have XLR plugs and balanced cables, which have the following characteristics.



The plugs lock in and don't rip out easily when someone trips over something.

the cables have three conductors, which not only make them thicker and more resistant to rough handling, but also means that they're less likely to pick up buzz, hum, etc.

Balanced vs Unbalanced— An unbalanced audio path has two conductors. One carries the audio signal and the other is the shield/ground. There is nothing at all wrong with an unbalanced signal but at times can be susceptible to picking up interference from radio frequencies or electro magnetic fields causing noise and buzz and picking up the occasional unwanted radio station! In fact, a lot of gear is unbalanced on the inside even though it has a balanced input and output. Including some high end consoles.

A balanced signal has three conductors. It relies on a sum and difference principal.

Sum and difference is the combining (summing) of two signals that are out of phase from each other. Whatever doesn't cancel out is what you're left with (difference).

When two identical signals of identical amplitude (volume) are combined and one is 180 degrees out of phase from the other you have complete cancellation of that audio. However, if one of those signals is a different amplitude, you don't get complete cancellation. And it's this principal that makes a balanced audio path work.

The output from a balanced piece of gear will have the audio signal on XLR pin 2 (hot). That same signal will be present on pin 3 (cold) however that signal is at a lower amplitude than the signal on pin 2. The shield/ground will be on pin 1.

When the signal reaches a balanced input, the signal on pins 2 and 3 are combined with either pin 2 or pin 3 (usually pin 3) out of phase. If that cable happens to pick up interference along the way, it will be on all pins, in phase together and at the same amplitude. When it gets to the input, pins 2 and 3 are combined out of phase and any signal exhibiting the same amplitude (the noise) will

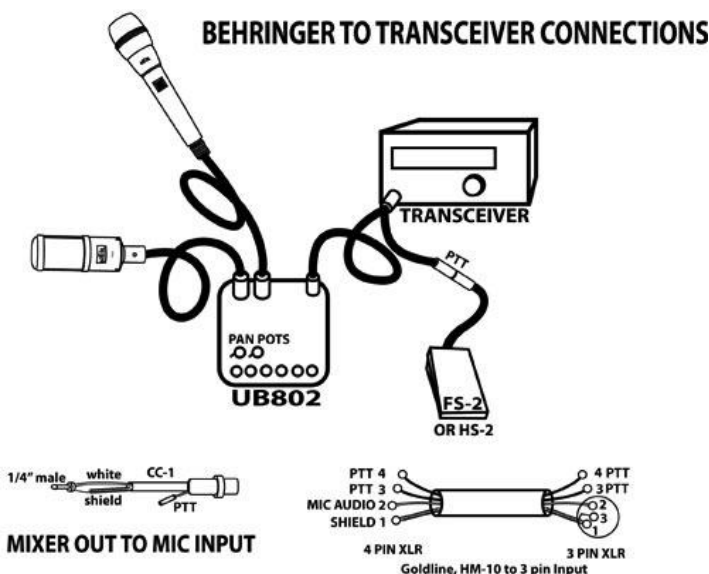
cancel out completely. Since the audio is at different amplitudes, it doesn't cancel out and you're left with the difference: clean audio!

Heil, Shure and Sennheiser are manufacturers of premium microphones. They generally come with XLR plugs but Heil in particular provides a vast array of adapters to interface their mics to almost any make of transceiver. Bob Heil [K9EID] is a ham himself and has devoted a great deal of time to perfecting mics that sound good despite the poor conditions often encountered with HF Amateur Radio.

All amateur radio transmitters (except the new Yaesu FTdx9000) unfortunately use an unbalanced microphone input. It's sad, but true. In connecting a balanced microphone, equalizer, or audio device that uses balanced signals, care has to be taken in how the balanced signal is UNBALANCED in order to feed that unbalanced input.

So you can't generally just plug a mic with an XLR cable into a radio jack, even with a properly wired adapter. That's because the mic will almost certainly have a lower impedance than the input of what you're plugging it into, and that means that unless you correct things with a matching device, it will sound like junk.

One option for HF home use is to invest about \$45 in a small mixer such as a Behringer Xenyx 802. This unit comes with 1/4" and XLR jacks but will adapt to almost any mic. It will even provide 'phantom' power to condenser mics when the radio does not provide it. The output of the mixer goes to your radio and you have full control over what your mic sounds like, particularly of you want to adjust the equalizer to punch through HF interference. I purchased mine at a music store here in Surrey and the difference is noticeable.



VHF and UHF Transceivers

generally come with low cost and sometimes low quality microphones. The mic on your handy talkie or a typical handheld mic is a condenser microphone. Manufacturers use different plugs and pin configurations though most amateur supply houses stock adaptors.



If you are participating in an event where you may be on the radio as Net Control for an extended period, a headset and boom or desk mic and a foot pedal are a must. Not only does it leave your hands free but the audio quality and lessened background noise will provide much better communication. My Heil desk mic and Heil headset will interface with all my transceivers (and even my computer) with adapters.

Hints on using your mic effectively

If using a handi talkie, invest in a hand-held microphone. It will be healthier not having that antenna radiating right beside your brain and also more comfortable in use.

Talk across the front of the handheld mic rather than directly into it. This will provide a less harsh and therefore clearer sound.

Push the 'Talk' button and pause a second. This will permit the repeater and any interface equipment with an opportunity to fully power up and avoids a portion of your transmission being cut off.

In closing, be careful about switching mics from one transceiver to another. Not only are different makes using mics with different pin connections but some manufacturers use different mics with the same plug on different models within their own brand. Transceivers generally carry a small voltage on one of the mic pins to power the condenser element. If this voltage is shorted because a pin is connected to another point inside the mic, say to ground, damage to the transceiver may result.

There is an excellent site with pin-outs for different mics at <http://homepage.ntlworld.com/rg4wpw/date.html>

~ John, VE7TI

Wanted

Rob VE7CZV needs an auto-tuner for his HF rig, specifically on 80m.

If you have or know of one that is available at a good price, please contact Rob via robgil@telus.net

Langley Good Times Cruise-in

Raffle Winners from September 8th Draw

On Saturday Sept. 8th, a few of the party faithful sold raffle ticket for LARA/SARC's benefit at the Langley Good Times Cruise-in. The table was set up on McBurney Lane between Fraser Highway and Douglas Crescent in the heart of Langley's commercial area.

Representing SARC and SEPARS were Jinty VA7JMR, Kelvin VA7KPH, Scott VE7HA, Brett VE7GM and John VA7XB. Showing the LARA flag were John VE7EEX, Al VA7MP, Dave VE7DPE, Debbie VA7DKB, Don VA7AB, Dave VE7BU, Paul VE7PCA and Bill VA7BGB. Those who have not attended this event cannot imagine the number and quality of vintage cars that are on display and the size of the crowd, with estimates of public attendance varying from 50,000 to 100,000. Langley's Mayor Peter Fassbender was on hand at 3 pm to say a few words about the contribution of the radio amateurs serving the community and to draw the winning tickets, which were:



First Prize (\$500 [Fairmont](#) Hotels gift certificate)

Cassandra Palm of Surrey, BC

Cassandra is going to use her gift prize to treat her grandma to tea at the Empress Hotel in Victoria.



Second Prize (Kimble eReader)

Dan Potvin VE7BYY of Surrey, BC

Third Prize (Bluetooth headset)

Darwin Harmon of Westbank, BC

Fourth Prize (Bluetooth headset)

John MacFarlane VE7AXU of Delta, BC

We should not fail to mention that the 3rd and 4th prizes of Bluetooth headsets were donated by Dave Barber VE7BU - thanks to Dave for his generous donation. And thanks also to Jinty for her superior sales abilities and for selling the 1st prize winning ticket for the second year in a row.



Remote Station Operation

For a number of years, SARC has been seeking a Club Operating Station. A number of factors have made this impractical including finding an 'HF-friendly' location, security, and the anticipated high cost of space rental and maintenance. Also, the facility would have to be accessible to SARC members with the correct licensing privilege 24x7x365 and be central enough within the city that people would use it.

Your Executive discussed the issue again at a recent Board meeting and it will be brought forward for discussion at the October General meeting

1. Who is active on HF?
2. Who is not active but would like to be?
3. Why not? Cost, lack of space or permission for an antenna, lack of time, lack of information on HF radio, other (specify).
4. If an HF station were made accessible to you (e.g. access over the internet), would you use it?

Member should consider their answers to these questions and be prepared to provide answers at the October meeting or send answers by email to: sarcsurvey@shaw.ca.

We realize that there are many reasons why members may not be active on HF, including cost, lack of interest in HF operations, insufficient licensing privileges, lack of space to raise a usable antenna, and strata or other rules restrictions. Other than an absence of interest in HF, the club Executive believe that we can address the other issues and allow you to operate from the comfort of your own home, anytime you feel so inclined.

For quite a number of years (the earliest reference that I could find dates back to the late-1940's using a telephone connection) the technology of operating an HF station remotely has been available. In the past 20 years, with the advent of Internet connectivity and CAT enabled radios, it has become simpler.

Among the first HF remote-controlled stations was one owned and operated by John Knight, W6YY (SK), then Chief Engineer for TV channel 4 in Los Angeles. He installed a 20-meter station at the transmitter site on Mt Wilson several thousand feet above his home in the La Canada, California area. John controlled the station over telephone lines. The advantages of remote control were recognized early and innovative hams have been exploiting them ever since.

I'm aware of several remote-controlled HF stations, and there are probably many more. One typical system is the single-operator-to-remote-site configuration. Examples include W6BH in Southern California (www.w6bh.com), W6RJ and KD6UO1 in Northern California, and OH2BH in Finland, but Google search shows there are many others.

As is typical of technology, the process has become easier, cheaper and more secure. For example, you cannot just permit anyone to come onto your website and operate a transceiver on the Amateur Radio bands. Options such as Virtual Private Networks (VPN) are now common, reliable and inexpensive.

Most radios can be remotely controlled via a so-called CAT interface. This connection permits operation of the radio

features via software. Typically an HF transceiver and antenna are placed in a secure location that has good propagation potential. The Internet is used to link this station to free remote control software on the user's home computer and the user can access the station remotely at any time. Ham Radio Deluxe software and Echolink are the most common choices. The best part... you can operate the station from across the city or from anywhere in the world that you have access to the Internet, and from just about any Internet-connected device. I have even logged into stations in Australia and Europe, and have logged into remote receivers in the US to determine if my HF transmission could be heard by them.

A Few Examples

W4MQ Web Radio. The owner and developer is Stan Schretter, W4MQ, in Reston, Virginia. The address for this site is www.w4mq.com. Stan's creation has different characteristics. It supports SSB in VOX and "push-to-talk" modes. You can also operate CW—interestingly, using the VOX function. Future plans include the addition of PSK31, UHF/VHF and satellite communication.

Currently the W4MQ HF remote-controlled station, although still in the developmental stage, is fully operational on SSB and CW on 160-10 meters. A visit to the Web site will bring you all the details about becoming an operator and instructions written by K6WR on how to setup and use the system.

There are other options, **EchoLink**® software allows licensed Amateur Radio stations to communicate with one another over the Internet, using voice-over-IP (VoIP) technology. One example, and there are many others, is KB1SO's HF station, which can be remote controlled by keyboard commands into EchoLink® chat text box or by using KB1SO Station Control software (download RayHamClient Beta release) or programs that use N8AD's **EchoBase** command set like ARTie. All users by default have receive only privileges, you may change frequency, mode and select up to 14 different antennas on 3 towers. If you'd like to transmit, send your request to kb1so@comcast.net and you may be granted privileges to transmit. You will be restricted from changing rotor direction and the use of high power amplifiers.

You may also wish to send an email to kb1so@comcast.net to request to be a Control Operator of the KB1SO station in Londonderry, New Hampshire. When you are the Control Operator of the KB1SO station you and only you have full control of the station as if you were sitting in front of the KB1SO station. Others may transmit that have transmit privileges, however you are the Control Operator and must ensure all users are in compliance with the rules and regulations of US Federal Communications Commission.

As your Executive, we are looking for new and innovative ways to have you enjoy all aspects of this hobby. If we can enable more members' use of HF then this is a means that we would like to explore in greater detail. We look forward to your input at the meeting on October 10th.

~ John VE7TI



Radio-Active Jinty Reid VA7JMR

Norman Schmidt VE7IIT

I would like to introduce and tell you a little about Norman who is more commonly known as Norm. He has been a member of SARC for about 40 years. He is proud to say he was born and raised in Vancouver. He was one of two boys. When he was a young lad he took piano lessons until Grade 8 piano. At 14 years of age he had lost interest in playing the piano so stopped taking lessons, although later in life he renewed his interest again. It was as a teenager that Norman developed an interest in electronics. Norm attended the University of British Columbia taking general courses.

While attending the university he joined a campus radio club. Eventually, he decided to become an Optometrist and pursued this career for about 40 years. Besides Vancouver, Norm has lived in Burnaby, New Westminster and now lives in North Surrey where, for the past 2 years, he has lived in his own suite in his daughter Karen's house.

Norm married Gladys, who was a nurse of German descent, and the couple had 4 children; 2 boys and 2 girls. One of their daughters is mentally handicapped and now lives in a group home in South Surrey. His other children live in Surrey, Sardis and Langley and he sees all his children on a regular basis. Norm first joined SARC around 1972 and took the Ham Radio course, struggling with the challenges of Morse code. In spite of this he passed the Basic exam with honours. He built a Heath Kit transmitter using his Elmer, Mike Heritage's antenna, and was very excited to be able to make contact as far as Germany.



Due to a busy family life he took some time out from being an active member of SARC. Part of that busy life was serving as President of the Kiwanis for 1 year, on the Board of Directors for the Board of Trade and on the Surrey Memorial Hospital Board.



Norm and Gladys bought a plot in Cultus Lake on which they constructed a summer cottage. The cottage holds many fond memories such as, sailing in their boat which Gladys named "Strictly Fer Boatin" which is a play on the German word "verboten" (forbidden). An interest in vintage cars led Norm into purchasing a 1925 Ford Speedster. On the property at Cultus Lake Norm had a large shed which housed the boat, vintage car and a workshop, nowadays known as a "man cave". Another interest of Norm's is photography and he is very proud of his sophisticated camera. When Norm retired he and Gladys sold their city home and after winterizing their cottage in Cultus Lake they moved there planning to make it their permanent home and enjoy a more peaceful rural life. Alas, after only 6 months Gladys was diagnosed with cancer and sadly succumbed to the disease. Naturally, this was a great loss in Norm's life but in time he decided he was not just going to sit at home and be sad but do some travelling. He purchased a motor home and followed the sun travelling to warm spots around the USA, such as Arizona, California, Florida, Mexico, Key West and New Orleans. Further afield, Norm visited the British Isles and has fond memories of his time spent there. He has also been to Holland.

Norm had a stroke 3 years ago but states that he is thankful that he has retained his ability to speak and move around with only some mild memory loss. "Shadow", his black cat, and long time companion has joined him in his travels in the motor home. Norm regularly attends the SARC Friday breakfast and club meetings. He has a Yaesu FT840 base radio set up in his kitchen area and as soon as he sets up his flexible J- Pole he wants to participate on the Tuesday night net. Norm laughs when he says he has a German name but unfortunately does not speak the language. You will recognize Norm because of his happy smiling face and jovial manner.



Chronology of a Tower Installation

John Brodie, VA7XB - Part 3

Part 2 of my chronology in last month's Communicator took us to the completion of the concrete pour. Since then I decided not to grout beneath the base plate, as grouting seemed likely to cause retention of moisture and possibly lead to corrosion; also, the leveling nuts would no longer be adjustable.

After the concrete set for a couple of weeks, I invited the willing crew over once more to help me move the tower from its storage location onto the base and bolt it to the hinge. This tower weighs something like 800 lb. so 3 or more persons are required to lift it. Although I still had the old bolts from the previous owner, the threads were in poor condition therefore I elected to purchase new $\frac{3}{4}$ inch galvanized Grade 5 bolts from Princess Auto. With the two hinge bolts in place, we installed the tower lifting device and attached its cable to the tower.



The hand winch was able to handle the lift easily as we slowly raised the tower to a vertical position [left] and bolted the 3rd leg. The leveling screws under the base plate were adjusted to get the tower perfectly plumb [right]. For the next week, I did not raise the tower higher, but just sat back and admired it before eventually lowering it to the ground

once again. I installed a mast and rotator - a Ham III - half way up the top-most section of tower, and connected an 8-conductor cable to both rotator and controller. After testing to see if the mast rotated as it should (it did), I attached my 2m/440 vertical to the mast and once again raised the tower to a vertical position.

Since then I have cranked up the tower sections to a height of about 35 ft. at which height it has remained for the last 2 weeks to "introduce it to the neighbours". So far, there has been no sign of the lynch mob! Three

ground rods are imbedded in concrete at the edges of the concrete footing. I connected each of these to its respective leg of the tower with #4 copper wire, using two stainless steel hose clamps. The copper wire is separated from the galvanized tower leg with a piece of $\frac{1}{8}$ " x $\frac{3}{4}$ " x 3" stainless steel in order to discourage galvanic corrosion which could be expected if the two dissimilar metals were in intimate contact. The other end of each ground wire is fastened to the copper-plated ground rod by bronze clamps. Before assembling the clamps and conductors, I smeared the surfaces with GB Ox-Gard paste (from Home Depot) to discourage oxidation and maintain a good electrical bond. What's next? I am waiting for a new 3-element beam, good for 40 m through 6 m and will attach it to the mast when it arrives in a couple of months. Then, I look forward to snagging some good DX in the winter months with my 100 watts.

You get help where you can...

[right] The erection crew.

[below] Spirit level in hand, Rob VE7CZV oversees quality control and gives the 'thumbs-up' that the final product is secure and plumb.



If you are interested in **Ham-oriented videos** and podcasts, try www.HamRadioNow.tv The latest episode features extensions and enhancements to D-STAR technology, but the author/editor covers all aspects of our hobby.

'Net' Working Internet Resources and Tidbits for Hams

CHIRP

A cellular technology that has Amateur Radio implications

Not to be confused with [CHIRP](#), the free multi-platform Amateur Radio programming software, this Chirp is an app that transmits data via a burst of "digital birdsong" aims to simplify the way users share images and other files between smartphones. Like an audio version of a QR code, Chirp plays a two-second long noise that sounds as if it was made by a robotic bird. When heard by other devices it triggers a download. The software was developed by Animal Systems, a spin-off business from University College London (UCL). It is free to use, but companies will be charged a fee for add-on services.

At the moment users are limited to sending pictures, website links or 140-character text messages. These appear in a feed similar to Facebook's timeline. Other applications such as Android Beam, Bump, Datasync and Dropbox allow users to swap material via bluetooth, wi-fi or links to cloud-based storage. But Chirp has the advantage that it can quickly send data to multiple devices at once without them needing to be either paired or have a wireless connection. If recipients are offline their devices will remember the "chirp" and download associated content later. "We are pretty sure this is unique," the firm's chief executive Patrick Bergel told the BBC. "We solve the problem of having to pair devices to move data. It's fairly novel to be able to transmit information to anyone who is in earshot - a large number of devices can share the same information at the same time using sound. "You can also use it as a device shifting mechanism. In the future you will be able chirp yourself a link to a map from your laptop."

Mr Bergel says Chirp's distinctive sound allows it to work at low volumes in relatively noisy locations such as pubs, clubs or busy streets. It can also work over public address systems or radio transmissions - potentially allowing broadcasters a way to send up-to-date pictures or links to background information; or an advertiser to send coupons or snippets of a song or promotional video. Animal Systems subscribes to a "blacklist" service to prevent users transmitting known pornographic or illegal-content website links. However, it does not plan to moderate other material.

The application works by uploading a user's material to the firm's servers. The data is then identified with a 50-bit address space: one of trillions of available identifiers. This location is then sent to the sender's device. When the user

presses a button in the app it plays an audio-encoded version of the address.

Copy-protected

Data has long been passed between machines in the form of sound, including recordings on tapes used to load programs into 1980s home computers and early modems dialing into networks. Even so, Mr Bergel said he had taken steps to prevent others copying his product. A feed of messaged material appears beneath a visualized sound-wave "We have a systems patent on moving short codes over the air," he said. "We have also solved a lot of difficult problems. There's a lot of technical issues around moving data and making it robust against noise and echoes." Having launched the app the five-man team behind it will now focus on offering premium services to marketers and other businesses. Mr Bergel said these could include:

- A guarantee that uploaded content would be permanently kept on the firm's servers.
- Access to analytical data letting firms track whose devices have "listened" to their chirp.
- The ability to send video messages that play within the Chirp app.

Mr Bergel said the ultimate goal was to see manufacturers pre-install Chirp on handsets. However, he must first convince users that they need the service at a time when Wi-Fi, 4G data and advanced Bluetooth connectivity are becoming increasingly common.

For now Chirp is only available as an iPhone app. An Android version is promised "soon" but Tim Kirby G4VXE has been testing it on Amateur Radio. If it can be developed for the hobby, the benefits are significant, especially as an emergency messaging mode. Imagine being able to send a high resolution photo in 2 seconds of audio tones.

Read Tim's blog at

<http://g4vxe.blogspot.co.uk/2012/08/experiments-with-chirp-sending-audio-url.html>

Video demo at

http://www.youtube.com/watch?v=4nTOYWD6lkg&feature=player_detailpage

Chirp

<http://chirp.io/>

*Do you have a photo or bit of club news to share?
Something to sell or something you are looking for?
Email it to ve7ti@separs.net for inclusion in this column.*

Top Right: The antenna specs.
Right: John VA7XB removes the old antenna.
ay up. The trees were tall but a bit more space
between would have been ideal.





SEPAR Report Kelvin Hall VA7KPH



Changes to the Tuesday Evening Net

With the SEPAR net on Tuesday August 28th we introduced a new message handling program. The practice message portion of the net has been suspended and replaced with a training session on the various components of the NTS message. The new SEPAR script is located on the SEPAR web site at <http://separ.shutterfly.com/>

To ensure that all SEPAR members have the same information we will be using the NTS Handbook available on the BC/Yukon net website. The document can be downloaded from

www.members.shaw.ca/brasskey/NTS%20HANDBOOK.pdf.

Training will follow the NTS handbook and break down into the preamble, the addressee, the body of the message and the signature. In addition each heading will be discussed as to the proper use on phonetics, pro-words, numbering, date and time format, originator and handling instructions. SEPAR members are encouraged to interact with questions and discuss the session training topic.

As SEPAR is an organization dedicated to emergency communications and traffic handling the net control will accept formal traffic at any time during the net.

CN Family Day

SEPAR participated in the annual CN Family Day event held at CN's Thornton Yard. It was a good opportunity to demonstrate our emergency communications ability along with the Surrey Emergency Program. The event helped build contacts with CN Rail employees and on one occasion we met a former CN telegrapher.



BC Shakeout October 18, 2012

You are invited to join thousands of people who will Drop, Cover, and Hold On on October 18th at 10:18 a.m. in the 2012 *Great British Columbia ShakeOut!*

More than 12.5 million people were registered to participate in ShakeOut drills worldwide in 2011. Participating is a great way for your family or organization to become better prepared to survive and recover quickly from big earthquakes.

The Mayor/Council, the public, the Fire Service, the BCAS, and the RCMP will be eyeballing the demonstration. Events like this give us brownie points when we need "green lights."

Relationships are everything. SEPAR is a lot like the police and the fire service. Everyone thinks you do a good job but no one knows what you really do and how you do it. When they do see what service you provide; they become allies.

For more information check out the Great British Columbia Shake Out web site at <http://www.shakeoutbc.ca/>

SEPAR Meetings

Third Thursday of each month starting at 1900 hrs

Fourth Saturday of each month starting at 0900 hrs

Location and event schedule can be found at www.separ.shutterfly.com — click on the calendar tab





News You Can Lose The Lighter Side of Amateur Radio

Some Movies We'd Like To see

- Pileup On The Orient Express
- Gone With The Wind - A Yagi Story
- Dxpedition To Skull Island By K1NG/KØNG
- Butch Cassidy And The Sundance Lid
- To Live and Let Diode - ØØ73
- Silence Of The Hams - Starring Rachel Squelch
- Contact - Starring AL1IEN
- Gone With The Windom
- VERTICAL!! Directed By Alfred Switchbox

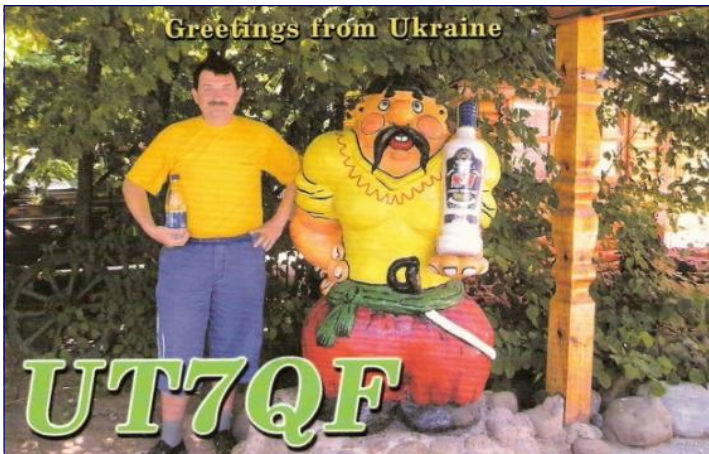


CQ Police?

Better stick to good operating practice,
the CQ police are watching you!

Hui Yee spotted this one on his way to work

QSL of the Month...



A story out of Hays, Kansas (where the wind is known to blow at times!). The sheriff is contemplating spending \$1,300 per year to lease tower space for a Ham repeater. The story is routine, but the comments below it may worth reading:

<http://www.hayspost.com/2012/09/05/role-of-amateur-radio-operators-may-determine-lease-agreement/>

Annual SARC Fees Now Due

SARC's fiscal year ended on May 31, 2012 at which time membership fees for the 2012/2013 year then become due. Considering the summer break, however, we normally begin collecting dues in October.

Treasurer, Scott VE7HA, will be please to receive your dues by cash or cheque at the October 10th meeting according to the following schedule:

Individual: \$30.00 Family (2 or more): \$40.00 with a discount of \$5.00 applicable if you are a member of RAC.

If you cannot attend the meeting, we ask that you mail your cheque to: Scott Hawrelak VE7HA 13935 80A Ave, Surrey V3W 6P5



RAC News Radio Amateurs of Canada

Public Service Honour Roll Criteria

This is to recognize Canadian radio amateurs whose public service performance during the month indicated qualifies for 70 or more total points in any or all of the following six categories (as reported to their Section Managers).

In each Public Service column published in The Canadian Amateur (TCA), the Public Service Honour Roll (PSHR) recognizes the efforts of Amateur Radio operators who are active in many aspects of public service. This includes net operations, traffic handling, emergency operations and public service communication support. It's likely that you're already involved with some aspect of Amateur Radio that would apply to the Public Service Honour Roll (PSHR).

Take a look at the categories and descriptions below to see where your Amateur Radio activities fit in. At the end of each calendar month, just add up your qualifying points. If it reaches the 70-point level (or more), you've qualified for the PSHR!

Simply report that news, with your call sign and monthly PSHR point total, to your RAC Section Manager. The RAC SM, in turn, will forward the report to RAC Headquarters so that it can be prepared for listing in TCA. Section Managers are listed at the RAC website at <http://www.rac.ca/fieldorg/racfoo.htm>.

Please note the maximum points for each category:

1. Participating in a public service net, using any mode. -- 1 point per net session; maximum 40.
2. Handling formal messages (radiograms) via any mode. - 1 point for each message handled; maximum 40.
3. Serving in a RAC-sponsored volunteer position: RAC Field Organization appointee or Section Manager, NTS Net Manager, TCC Director, TCC member, NTS official or appointee above the Section level. -- 10 points for each position; maximum 30.
4. Participation in scheduled, short-term public service events such as walk-a-thons, bike-a-thons, parades, simulated emergency tests and related practice events. This includes off-the-air meetings and coordination efforts with related emergency groups and served agencies. - 5 points per hour (or any portion thereof) of time spent in either coordinating and/or operating in the public service event; no limit.

5. Participation in an unplanned emergency response when the Amateur Radio operator is on the scene. This also includes unplanned incident requests by public or served agencies for Amateur Radio participation. - 5 points per hour (or any portion thereof) of time spent directly involved in the emergency operation; no limit.

6. Providing and maintaining: a) an automated digital system that handles RAC/ARRL radiogram-formatted messages; b) a Web page e-mail list server oriented toward Amateur Radio public service -- 10 points per item.

Amateur Radio stations that qualify for PSHR over twelve consecutive months, or 18 months out of a 24-month period, will be awarded a certificate from RAC Headquarters upon written notification of qualifying months to the RAC Vice President for Field Services.

Further Explanation of PSHR Categories

1. Participation in a public service net -- 1 point, maximum 40.

An example of a public service net is one that is regularly scheduled and handles Amateur Radio formal messages. There are many such public service nets: local and section nets that are affiliated with the National Traffic System (NTS); NTS region, NTS area, and independent nets that handle messages. ARES and CANWARN nets that meet on a regular basis and pass formal traffic would also qualify.

Public service or emergency nets that are activated to support an actual or potential emergency or a public service event would be part of this first category. A net that has been established for training radio amateurs in public service and emergency communications would qualify! Are you looking for a public net to check into? Try the on-line ARRL Net Directory:

<http://www.arrl.org/FandES/field/nets/clients/index.html> and the RAC listings of nets, found at <http://www.rac.ca/amateur-radio/operating-technical/nets/>.

2. Handling formal messages (radiograms) via any mode -- 1 point for each message handled; maximum 40.

The Public Service Communications Manual explains how to count your individual messages. Here is a reference from Section 2, NTS Chapter 10.2. (You may find the entire manual at this Web page:

<http://www.arrl.org/FandES/field/pscm/>)

Originated--One point for each message from a third party for sending via your station. This "extra" credit is given for an off-the-air function because of the value of contact with the general public.

Sent--Every message sent over the air from your station to another amateur receives a point in this category. Thus, a message that is eligible for an Originated point as above receives another point when it is sent on the air.

Likewise, a message that is received on the air conveys a Sent point when it is relayed to another station. A message that you initiate yourself, while it gets no Originated point, gets a Sent point when cleared. All Sent points require on-the-air sending.

Received--A message received over the air gets a Received point, whether received for relaying (sending) or for delivery to the addressee. Any message received which is not eligible for a Delivery point (such as one addressed to yourself) is nevertheless eligible for a Received point.

Delivered--The act of delivery of a message to a third party receives a point in this category, in addition to a Received point. This is strictly an off-the-air function and must be coupled with receipt of the message at your station. Thus you can't get a Delivered point unless you first get a Received point.

For additional details on traffic handling and net operations and the National Traffic System, the NTS Methods, Practices and Guidelines is a resource available to you via the ARRL Web page:
<http://www.arrl.org/FandES/field/nts-mpg/> .

3. Serving in a RAC-sponsored volunteer position: RAC Field Organization appointee or Section Manager, NTS Net Manager, TCC Director, TCC member, NTS official or appointee above the Section level. -- 10 points for each position; maximum 30.

RAC Field Organization appointees (in alphabetical order) include the following: Assistant Section Managers, District Emergency Coordinators, Emergency Coordinators, Local Government Liaisons, Net Managers, Official Bulletin Stations, Official Emergency Stations, Official Observers, Official Observer Coordinators, Official Relay Stations, Public Information Coordinators, Public Information Officers, Section Emergency Coordinators, Section Managers, Section Traffic Managers, Provincial/Territorial Government Liaisons, Technical Coordinators and Technical Specialists. Active members of the newly-instituted RAC Regional Amateur Radio Alert Network (RARAN), which acts in support of the AMBER Alert, may also claim points by serving in this position.

The Section Manager is the RAC member-elected RAC official in the section. An NTS official or appointee above the Section level would include Region and Area Net

Managers, and TCC (Transcontinental Corps) Directors who are in charge of organizing TCC membership rosters of operators that comprise the corps. TCC members are those operators that are assigned to relay traffic from one NTS area to another, conducting liaison with NTS nets to do so. NTS Members at Large, NTS Area Staff Chairs, NTS Area Digital Coordinators and Digital Stations would also be included in this category.

4. Participation in scheduled, short-term public service events such as walk-a-thons, bike-a-thons, parades, simulated emergency tests and related practice events. This includes off-the-air meetings and coordination efforts with related emergency groups and served agencies.

Five points per hour (or any portion thereof) of time spent in either coordinating and/or operating in the public service event; no limit.

This category recognizes the value of public safety communication events in which Amateur Radio is often called to participate. Simulated emergency tests (SETs), exercises and drills are covered by this category. Points are gained by the amount of time that an Amateur Radio operator spends directly involved in operating the event. This also recognizes the value of off-the-air time it takes to meet with the organization or public service agency to plan and coordinate Amateur Radio involvement.

5. Participation in an unplanned emergency response when the Amateur Radio operator is on the scene. This also includes unplanned incident requests by public or served agencies for Amateur Radio participation.

--5 points per hour (or any portion thereof) of time spent directly involved in the emergency operation; no limit.

This category recognizes an Amateur Radio operator who is directly involved in an actual emergency operation. This includes the operator who is on the scene or out in the field, in the shelter, at the emergency operations center, at the hospital, or other served agency's headquarters or their temporary command center.

If you are an active participant in an unplanned incident - or in other words, an emergency operation--you may take credit for this participation even though you may not be physically at the emergency scene.

Category 5 covers all the Amateur Radio operator participants such as net controllers, net liaison stations and other radio amateurs who support communications in unplanned incidents. Even if you are not actually on the emergency scene or at the shelter, etc, but are spending time and efforts for supporting the same emergency communication effort, this time would count for points in Category 5.

As an example, Environment Canada activates CANWARN, Amateur Radio operators serve as weather spotters from

their home (or car, or work, or other location) during the weather event. Then, a tornado strikes and the Red Cross calls out the ARES members to serve in shelters and to provide support for damage assessment communications. These operators would be able to qualify for Category 5 points.

There would likely be several net control operators, net liaison operators, traffic handlers, etc, who are away from the disaster scene, but are spending time to support the Amateur Radio emergency communication effort on behalf of the served agencies (Red Cross and Environment Canada, in this example). They, too, would qualify for points under Category 5.

6. Providing and maintaining: a) an automated digital system that handles RAC/ARRL radiogram-formatted messages; b) a Web page e-mail list server oriented toward Amateur Radio public service -- 10 points per item.

Category 6 (a) recognizes the efforts it takes to provide and maintain an automated digital system (like a packet bulletin board or a PACTOR system) that handles RAC/ARRL radiogram-formatted messages.

Category 6 (b) recognizes that Web pages and e-mail list servers have become popular and effective ways to communicate news and information to the community of radio amateurs that are involved in emergency and public service communication operations and preparedness.

If you are involved in any of these activities, keep track of your efforts and the time involved and report your results accordingly. If you qualify for PSHR over twelve (12) consecutive months, or 18 months out of a 24-month total period, you are eligible for a one-time certificate from RAC Headquarters. Please write (and include a list of qualifying months) to the Vice President for Field Services, RAC HQ.

Further questions about the program may be sent to VPFS Doug Mercer, VO1DTM at RAC HQ.

The Field Services in both the United States and Canada are virtually identical in operation. In fact, it was the ARRL that originated the FS. Today, the RAC and the ARRL act in cooperation and the RAC Honour Roll is modeled after that of the ARRL. More information about the ARRL PSHR may be seen at this Website.

Two Commercial Operations Evicted from Two Meter Band

Following investigation into several member complaints, the Radio Amateurs of Canada is pleased to announce that two cases of frequency incursion have been resolved.

In the first, a transportation company based in Reinfeld, Manitoba was observed to be operating illegally on 144.100 Mhz. In addition to operating inside the amateur radio two meter band, this operation posed a threat to low signal operations across a wide portion of North America. The company in question had purchased VHF radios from a US based supplier who failed to indicate correct licensing procedures. Upon contact from RAC, the company agreed to immediately cease operating in the two meter band and shifted their operation to a business band frequency. Industry Canada was notified of the incursion and continues to work with the company to secure a licensed channel.

In the second matter, a home moving company was observed to be operating on 144.940 Mhz. The company is based in Winkler, MB but the operation was observed in Alberta during the moving of a house. In this case, the company had already licensed frequencies with Industry Canada. They had requested 144.940 Mhz as a channel. Their request was denied by Industry Canada and a business band channel was issued. However, the company failed to check their license paperwork and assumed they had been approved for their requested channel.

The moving company was also contacted by RAC and agreed to move their operations to their correctly licensed frequencies. Given their wide geographic operations Industry Canada has licensed their operation on four separate channels including 140.730, 154.325, 158.940 and 151.730.

In both cases, it appears that channels in the two meter band were chosen by these businesses because their new vhf radios defaulted to that frequency range. As well, both businesses indicated they could simply dial a new frequency into the radio to move out of our band.

This is strong cause for concern that the actual radios being used are modified Amateur Radio equipment. The use of equipment intended for Amateur Radio operation outside of the Amateur Bands or by persons who do not hold an Amateur Radio Certificate is illegal.

Action on these and other incursions has been made possible by quality reports from monitoring stations. RAC thanks those Amateurs who have provided assistance in these specific files. The strong national voice for Amateur Radio that the Radio Amateurs of Canada provides is made possible by members across our country and associate members beyond our borders. You can find out more about the benefits of membership for you and the benefits to Amateur Radio as a whole at www.rac.ca

Reports of confirmed or suspected illegal operation should be sent to regulatory@rac.ca

The SARC Calendar ...places to be in Surrey for Amateur Radio in the month ahead

October 2012						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30 	1	2 SEPAR NET 7:30 SARC NET 8:00	3	4	5 Weekly SARC Breakfast 8:30 ABC Restaurant 74th & King George Blvd.	6 CONTESTS: TARA PSK Rumble Oceana DX SSB
7 CONTESTS: Oceana DX SSB	8 Thanksgiving	9 SEPAR NET 7:30 SARC NET 8:00	10 SARC General Meeting	11	12 Weekly SARC Breakfast 8:30	13 CONTEST: Oceana DX CW
14 CONTEST: Oceana DX CW	15	16 SEPAR NET 7:30 SARC NET 8:00	17	18	19 Weekly SARC Breakfast 8:30	20 CONTEST: NY QSO Party
21 CONTEST: NY QSO Party	22	23 SEPAR NET 7:30 SARC NET 8:00	24 SARC Exec Meeting	25	26 Weekly SARC Breakfast 8:30	27 CONTEST: CQ WW DX Contest (SSB)
28 CONTEST: CQ WW DX Contest (SSB)	29	30	31 Halloween	1 For details on all SARC events, go to ve7sar.net For details on all SEPARS events, go to separs.net	2	3

Contest Details: <http://hornucopia.com/contestcal/contestcal.html>



QRT John Brodie VA7XB

Because I forgot to bring the spreadsheet I had prepared for our Sept 12th meeting, we were unable to review the list to identify those tasks that still require a task manager. So, I have reproduced the spreadsheet below. Those tasks that remain unassigned are highlighted in **red**. If you have not already volunteered for something, can spare the time and have an interest in promoting the vitality of this club, we need to hear from you. If you are willing to help but don't want to take the lead position, there are many opportunities to assist the task manager.

TASK/POSITION	TASK MANAGER	ASSISTED BY	SPECIFIC DUTIES
President	John VA7XB		Coordinate all activities
Vice President	Brett VE7GM		Back up President as required
Secretary			Meeting minutes, correspondence
Treasurer	Scott VE7HA	External auditor	Banking, prepare financial statements
Director1 - Communicator	John VE7TI		Prepare Communicator
Director2 - SEPARS liaison	Kelvin VA7KPH		Coordinate SARC and SEPARS activities
Director3 - Repeater	George VE7QH	Steve VE7MAN	Maintain repeater(s)
Director4 - RAC	Bill VE7XS		RAC liaison
Director5 - Membership	Bill VA7ZBL		Keep membership list up to date
Director6 - at large	Rob VE7CZV		
Programs & Ham Class			Program planning and ham classes
Webmaster	Hui VE7YXG	Susan VE7IIE	Maintain website
Field Day	Brett VE7GM	John XB; Chris CWX; Jim FO	Coordinate all FD activities
Field Day - food	Joyce VA7JCE	Duncan VA7DCN	Organize food & refreshments
Foxhunt	Anton VE7SSD		Organize Foxhunt
Christmas Party	Jinty VE7JMR	Joyce & Duncan; John XB	Arrange venue, door prizes, program, Amateur of Year award
Writeup of Events	John VA7XB		Ensure that Communicator & Web are provided with timely & accurate narratives
Write technical articles for Communicator			
Operator Training	Jim VE7FO	Brett VE7GM	Arrange training, encourage & mentor participants
Nets Manager	John VE7TI		Arrange net control schedule, keep track of check-ins
Assistance to Members	John TI, John XB	Brett GM, Kelvin KPH	Help members get on the air
Equipment maintenance (esp. towers)	Rick VE7GMO		Check large equipment regularly, keep log, inspect & maintain
Equipment inventory	Anton VE7SSD		Maintain list, including new acquisitions, sufficient for financial statement
BCARCC Rep	George VE7QH	John VA7XB	Attend meetings annually, represent SARC
Prepare notices for events	John VE7TI		Use graphics software to prepare professional-looking notices
Member Profiles for Communicator	Jinty VE7JMR		Select members and prepare profiles for Communicator
Meeting Refreshments	Anton VE7SSD		Maintain supplies, prepare coffee etc.
Photography	Hui Yee VE7YXG	Anton VE7SSD, John VE7TI	Record SARC events
Meet & Greet	Arthur VE7SIE & Nicole VE7PET		Welcome new members & visitors; introduce at meetings
Review Executive Structure & Bylaws	John VE7TI	George VE7QH	Recommend changes as needed
Nominating Committee			Prepare list of nominees for next AGM; address succession plan.
Update Club history for website			Update annually